Cover up and clean up to prevent deadly infections

BY JANIE FULLER, DDS, MPH, MT(ASCP)

PHYSICAL THERAPISTS cleaned patients' wounds with a pulsatile lavage with suction (PLWS) wound debridement system. Subsequently, several of these patients developed serious Acinetobacter infections that were resistant to multiple drugs, and some patients died.

What went wrong: These PLWS devices use pressure-pulsed irrigation and suction to clean wounds. According to one study, the devices can scatter infectious agents up to 8 feet. These physical therapists didn't follow standard precautions, use personal protective equipment, or clean the treatment room between PLWS-treated patients.

Taking precautions: Make sure that all health care workers follow these rules when using PLWS devices. PLWS device use and maintenance:

- Become familiar with all device instructions for use and optimal techniques to minimize contamination of the environment.
- Use continuous suction (one device manufacturer recommends 60 to 100 mm Hg).
- Keep the splash shield in contact with the wound/periwound area at all times.
- Empty the suction waste canister after each patient use or as directed by the manufacturer.
- Dispose of all single-use pulsatile lavage components, as appropriate, immediately after use. Thoroughly clean, then sterilize or disinfect, as appropriate, all reusable items. Environmental controls:
- Always perform pulsatile lavage in a private room enclosed with

walls and doors (no privacy curtains or large open areas).

- Follow standard practices to minimize potential contamination of equipment and supplies (for example, allow only essential equipment in the treatment room and no open shelves or cabinets).
- After each patient treatment, thoroughly clean and disinfect environmental surfaces that are touched by hand.
- Minimize contamination by limiting direct contact with exposed surfaces during treatment. Consider covering those surfaces at greatest risk for aerosol contamination.
- Ensure that the room is appropriately ventilated.

Personal protective equipment:

- Wear a fluid-proof gown, gloves, mask/goggles or face shield, and hair cover.
- Consider having patients use a droplet barrier, such as a surgical mask, during PLWS treatment.
- Use a drape or towel to cover all patient lines, ports, and wounds that aren't being treated.

SELECTED REFERENCE

Loehne HB. Pulsatile lavage with concurrent suction. In Sussman C (ed), Wound Care: A Collaborative Practice Manual for Physical Therapists and Nurses, 2nd edition. Gaithersburg, Md., Aspen Publishers, Inc., 2001.

Although you need to support the adverse event-reporting policy of your health care facility, you may voluntarily report a medical device that doesn't perform as intended by calling MedWatch at 1-800-FDA-1088 (fax: 1-800-FDA-0178). The opinions and statements in this report are those of the author and may not reflect the views of the Department of Health and Human Services. Beverly Albrecht Gallauresi, RN, BS, MPH, coordinates Device Safety and is a nurse-consultant at the Center for Devices and Radiological Health at the Food and Drug Administration in Rockville, Md., where Janie Fuller, a captain in the U.S. Public Health Service, is a regulatory review officer in the Division of Postmarket Surveillance.